THE BETTER POLICY PROJECT

Open-Source Economics Workshop

May 19 – 30, 2025

Chulalongkorn University

Bangkok, Thailand

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Introduction

Welcome to **The Better Policy Project (BPP)**, a distinguished institution in Portugal dedicated to excellence in policymaking and economic analysis.

At BPP, innovation is at the core of everything we do. We continually seek new ways to push the boundaries of economic analysis and policymaking, ensuring that our programs remain at the forefront of industry trends. Moreover, we strongly believe in the power of global cooperation and collaboration. By fostering partnerships with institutions and experts worldwide, we enrich our programs with diverse perspectives and experiences. Additionally, we are committed to **democratizing** access to knowledge. Through open-access resources, online platforms, and collaborative initiatives, we strive to make our expertise accessible to everyone who is interested, regardless of geographic location or background.

BPP offers a comprehensive array of solutions and training programs tailored to empower economists and policymakers worldwide. In this document, we provide an overview of the extensive range of training, courses, and opportunities available through BPP.

5+

Years of operations

20+

Institutions

200+

Students

The Better Policy Project

↗ About Us

Nestled amidst the picturesque landscapes of Portugal, The Better Policy Project (BPP) is known for its innovative approach to policymaking. With our headquarters strategically located in the vibrant urban hub of Lisbon and sun-kissed Algarve, our journey started in the year 2019.

In response to the unprecedented challenges brought by the global COVID-19 pandemic, BPP swiftly pivoted its operations to the digital sphere, leveraging technology to ensure continuity in our endeavours. However, as the world recovered from the pandemic, we took the chance to bring back in-person events. Starting from the end of 2022, we organized a series of exciting events, in collaboration with the Central Bank of Armenia's Dilijan Training and Research Centre, in the beautiful locations of Algarve, Portugal, and Dilijan, Armenia.

Despite returning to in-person events, we made the most of online platforms, ensuring that our events were hybrid to provide opportunities to participants worldwide.

↗ Mission

Our main aim is to help policy-making institutions build better and more efficient policy frameworks, improve transparency and communication, and promote a better work-life balance.

↗ Vision

Our ambitions stretch across borders. We are dedicated to building a worldwide community of economists and policymakers who share a passion for sharing knowledge and solving problems together.

↗ AI Revolution

BPP is pioneering AI technologies to revolutionize macroeconomic modeling and economic operations. These innovations include enhanced forecasting, decision-making tools, and streamlined human resource processes.

The Better Policy Project

Through a range of engaging seminars and workshops, we've had the honor of hosting esteemed experts in the field including Larry Summers, Charles Goodhart, Athanasios Orphanides, John Taylor, Michael Bordo, James Hamilton, Lawrence Christiano, Michel Juillard, Junior Maih, and a multitude of other esteemed economists. Their ongoing collaboration continues to serve as an invaluable source of wisdom and guidance, driving our efforts towards impactful change.

- Economic Modeling
- Triaining
- Forecasting
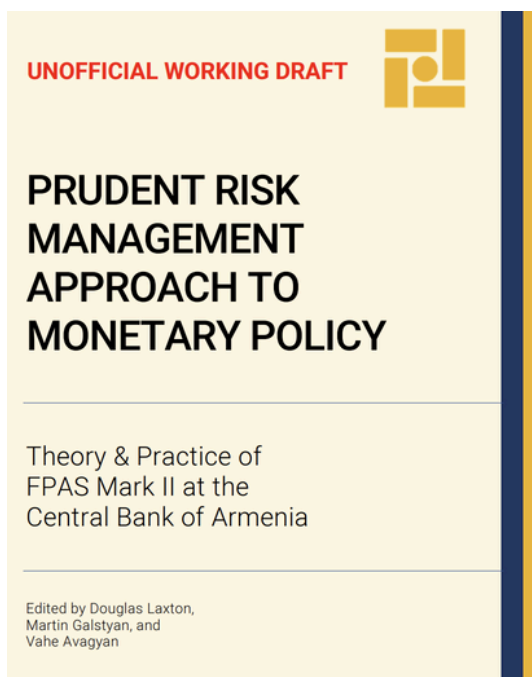- Open-Source Software & AI
- Bootcamps
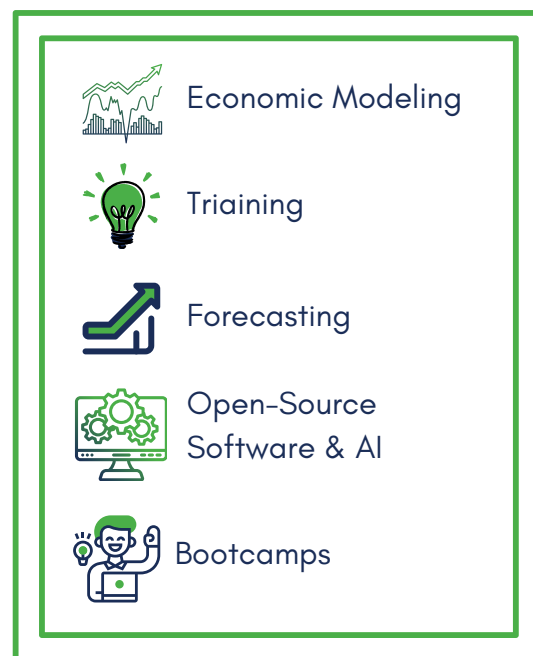
Our collaboration with renowned economists like David Archer, Robert Ford, Ioannis Halikias and Hamid Faruqee, along with the Central Bank of Armenia, led by Governor Martin Galstyan and Vice Governor Armen Nurbekyan, as well as all the esteemed Board members, has resulted in the development of a new and improved Forecasting and Policy Analysis System, known as **FPAS MARK II**. This upgraded system is tailored to improve the previous versions of FPAS. We've established the entire infrastructure, including a range of models, from simple linear ones to more advanced non-linear and DSGE models, as well as programs for recruiting and training staff, improving institutional transparency, and efficient schedules for policy discussions and decision-making.

FPAS MARK II is specifically designed to handle uncertainties and complexities in the economy more effectively, providing a stronger framework for managing unexpected events. All our processes are thoroughly documented in various working papers and an upcoming book (links to be provided). The Central Bank of Armenia has become the first in the world to adopt FPAS MARK II. Its launch was accompanied by a significant symposium held on January 11-12, 2024.
https://www.youtube.com/@thebetterpolicyproject

Our Solutions

UNOFFICIAL WORKING DRAFT

PRUDENT RISK MANAGEMENT APPROACH TO MONETARY POLICY

Theory & Practice of
FPAS Mark II at the
Central Bank of Armenia

Edited by Douglas Laxton,
Martin Galstyan, and
Vahe Avagyan

In today's dynamic economic landscape, central banks (CBs) implementing Flexible Inflation-Targeting (FIT) policies rely heavily on forward-looking approaches to guide their decision-making processes. A crucial aspect of this approach is the availability of an effective organizing framework that aids in understanding the implications of alternative policy choices and facilitates decision-making amidst uncertainty. Saddle Point Research (SPR) proposes a collaborative effort to further advance policy analysis capabilities by evolving the Forecasting and Policy Analysis System (FPAS).

↗ Developing an Advanced FPAS Framework

- Refine the existing FPAS framework to better accommodate the evolving needs of policymaking.
- Incorporate advanced methodologies to manage uncertainties and risks inherent in policy decisions.
- Provide tools for structured scenario analysis to assess the implications of alternative policy choices.

↗ Training and Capacity Building

- Establish training programs focused on core knowledge areas essential for conducting policy analysis using FPAS.
- Offer workshops, seminars, and online courses to equip policymakers with practical skills in scenario analysis and risk management.
- Facilitate knowledge transfer through expert-led sessions and peer-to-peer learning opportunities.

Our Solutions

↗ Coaching in Essential Policy Analysis Areas

- Modern Monetary and Macroprudential Policy frameworks: Principles and Application to FPAS.
- Best and Worst Practices: Central Bank Efficiency, Monetary Policy Transparency, and Communications.
- Closed-Economy and Open-Economy semi-Structural Models in DYNARE and their Application to FPAS Mark II.
- Policy Modeling in Open-Source Software: PythonDynareJulia.
- Monetary Policy Model with Endogenous Policy Credibility.
- DSGE Economics and Collection of Some Useful and Not-So-Useful DSGE Models.
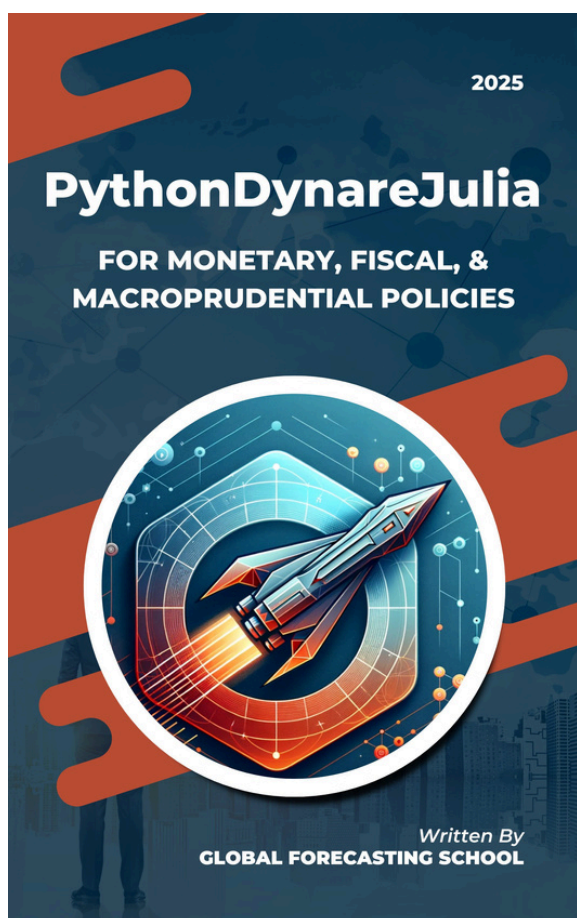
↗ Collaboration and Knowledge Sharing

- Create a collaborative platform for central banks and policymakers to share best practices and insights.
- Encourage participation in joint research projects to advance the field of policy analysis and economic forecasting.
- Establish a network of FPAS practitioners to support ongoing learning and innovation.

Our Solutions

Capacity Building
Country-specific development of forecasting and policy analysis infrastructure with our experts.

Daily Meetings
Engage in interactive daily meetings for guidance, progress updates, and addressing queries.

Online and In-Person Training
Access high-quality training materials and expert instruction through a blend of online and in-person sessions.

Hands-On Workshops
Apply theoretical concepts in practical scenarios, gaining actionable skills for real-world challenges.

Interactive Sessions
Interact with industry experts, participate in discussions, and build valuable connections with peers.

Comprehensive Curriculum
Receive training on economic theory, data analysis, modeling techniques, AI, policy analysis, and more.

Courses
Opportunity to be involved in all our courses and bootcamps.

Open-Source Economics Workshop

Welcome to the **Open-Source Economics Workshop**, an immersive in-person program designed to guide students from the absolute basics to a comprehensive understanding of macroeconomics and data science. Utilizing powerful open-source tools like Python, R, and DynareJulia, this workshop offers a robust curriculum tailored to equip participants with the skills needed for advanced economic modeling and forecasting.

Over the past few years, we have established a strong reputation for delivering high-quality educational programs. Our previous summer schools in Portugal and Armenia have been particularly successful, known for their rigorous academic content and practical, hands-on approach. We are excited to bring this expertise to our current workshop, ensuring participants receive top-tier instruction and valuable experience.

Join us at the Open-Source Economics Workshop and embark on a transformative learning experience. Whether you are a student, researcher, or professional, this workshop will provide you with the knowledge and skills to excel in the dynamic field of economics.

March 14, 2025	**Application Deadline**
May 19 - 23, 2025	**Python for Economists**
May 19 - 23, 2025	**R for Economists**
May 26 - 30, 2025	**Macroeconomic Modeling in DynareJulia**
May 26 - 30, 2025	**Advanced Macroeconomic Research Methods**

Open-Source Economics Workshop

Meet Our Experts

Asya Kostanyan
The Better Policy Project

Mariami Tchanturia
National Bank of Georgia
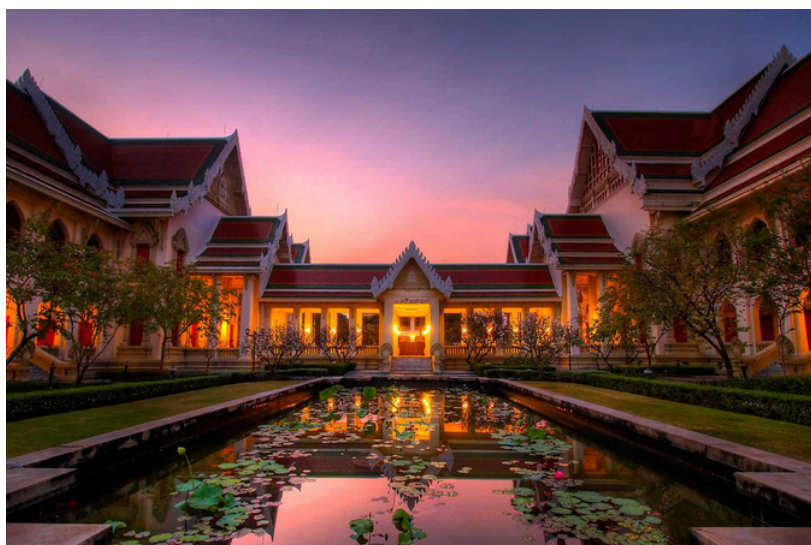
Haykaz Igityan
Central Bank of Armenia

Aleksander Hycnar
Sciences Po Paris

Location

Chulalongkorn University, Bangkok, Thailand

Price

1000 Euros Per Participant Per Course

R for Economists

May 19 - 23, 2025

Why R? And Why Now?

- **Precision Tool:** R has been the go-to for statisticians and data miners. Its power in statistical modeling and graphics is renowned.
- **Extensive Libraries:** With a rich ecosystem of packages tailored for a wide range of statistical techniques, R offers tools for every need.
- **Community-Driven:** R's growing community ensures constant updates, new packages, and a wealth of shared knowledge.
- **Tailored for Economists:** R's capabilities resonate particularly well with the needs of economists, making data manipulation, analysis, and visualization more intuitive than ever.

Day 1: Introduction to R

- Introduction to R & RStudio.
- Basics of Data Manipulation.
- Data Aggregation & Summarization: Methods for aggregating and summarizing data.

Day 2: Data Visualization and Exploration

- Data Visualization with ggplot2.
- Advanced Visualization Techniques: Complex visualization methods for informative charts and graphs.

Day 3: Statistical Modelling for Economists

- Regression Analysis: Principles and applications of regression analysis.
- Time Series Analysis: Techniques for analyzing time series data.
- Econometric Models in R: Applying econometric models to analyze data.

Day 4: Advanced Data Techniques and Reporting

- Working with Larger Datasets: Efficiently handle and analyze larger datasets.
- R Markdown for Reporting: Create dynamic and reproducible reports.
- Shiny for Interactive Web Apps: Develop interactive web applications.

Day 5: Machine Learning for Economic Analysis

- Introduction to Machine Learning in R.
- Regression and Classification Models: Predict economic outcomes using regression and classification models.
- Clustering and Dimensionality Reduction: Techniques for uncovering hidden data structures and simplifying analysis.

Python for Economists

May 19 - 23, 2025

Python is a crucial programming language in today's digital age due to its versatility and ease of use. Its simple syntax allows beginners to quickly grasp programming, while powerful libraries enable complex application development. As businesses increasingly rely on data and automation, Python skills are in high demand, offering significant career opportunities.

Python's extensive community ensures continuous improvement and support, making it ideal for cutting-edge technologies like machine learning and natural language processing. For economists and data analysts, Python's data manipulation and visualization capabilities are invaluable.

Day 1: Introduction to Python and Data Science

- Basics of Python programming, including syntax, loops, and functions.
- Overview of essential Python libraries like NumPy and pandas for data science tasks.

Day 2: Data Manipulation, Cleaning, and Visualization

- Importing data from CSV and Excel files into pandas DataFrames.
- Data cleaning techniques, including handling missing values and data transformation.
- Creating visualizations with matplotlib and seaborn to explore data trends.
- Applying descriptive statistics to summarize and interpret economic data.

Day 3: Web Scraping Basics

- Setting up Python for web scraping and understanding HTML/CSS structures.
- Making HTTP requests with Python and using BeautifulSoup to extract data from static web pages.

Day 4: Advanced Web Scraping Techniques

- Using Selenium to interact with and extract data from dynamic web pages.
- Best practices for storing and cleaning scraped data for further analysis.

Day 5: Introduction to NLP and Applications

- Techniques for cleaning and preprocessing text data.
- Basic text analytics, including sentiment analysis and topic modeling.
- Exploring real-world NLP applications in economics and future trends.

Macroeconomic Modeling in DynareJulia

May 26 - 30, 2025

DynareJulia is a cutting-edge tool that represents the future of macroeconomic modeling. It is rapidly becoming essential for economists and analysts involved in economic modeling, policy analysis, and forecasting. The ongoing development of DynareJulia, led by Michel Juillard, ensures that the platform remains at the forefront of macroeconomic modeling, continuously integrating new tools and features.

DynareJulia enables users to handle complex models with greater efficiency, making it an invaluable tool for modern economic analysis and policy formulation. Mastering DynareJulia allows economists to leverage cutting-edge technology, improving the depth and reliability of their economic insights and analyses.

Day 1: Introduction to DynareJulia and Setup

- Overview of DynareJulia and its applications in macroeconomic modeling.
- Step-by-step guide to installing DynareJulia and setting up the environment.
- Running simple models in DynareJulia.

Day 2: Quarterly Projection Models in DynareJulia

- Introduction to Quarterly Projection Models (QPM) and their role in economic forecasting and policy analysis.
- Developing a QPM in DynareJulia with endogenous policy credibility.

Day 3: Structural DSGE Models in DynareJulia (Part 1)

- Overview of DSGE models and their significance in macroeconomic analysis.
- Building a Basic Structural DSGE Model
- Step-by-step guide to constructing a simple structural DSGE model in DynareJulia.
- Calibration and simulation of the model.

Day 4: Structural DSGE Models in DynareJulia (Part 2)

- Advanced Structural DSGE Modeling
- Incorporating more complex features into DSGE models, such as shocks and frictions.

Day 5: Bayesian Estimation Techniques in DynareJulia

- Overview of Bayesian methods and their application in macroeconomic modeling.
- Implementing Bayesian Estimation in DynareJulia

Advanced Macroeconomic Research Methods

May 26 - 30, 2025

This 5-day course provides an overview of research methodology in economics, with a focus on macroeconomics and macroeconomic policies. The course emphasizes practical skills for writing and publishing research, critical thinking, and avoiding simplistic analysis, often referred to as "elevator economics."

Day 1: Foundations of Economic Research
- Introduction to Research Methodology
- Importance of Critical Thinking
- Exercise: Discussing a Recent High-Impact Paper
- Workshop: Formulating Research Questions

Day 2: Economic Models and Policy Analysis
- Overview of Economic Models and Applications in Macroeconomic Policy Analysis
- Exercise: Identifying "Elevator Economics" in Recent Papers
- Discussion: Avoiding Simplistic Analysis
- Workshop: Critiquing Policy Implications

Day 3: Technical Tools and Software
- Introduction to Dynare and DynareJulia and Research Reproducibility
- Exercise: Analyzing Results from Published Papers
- Policy Briefs and Communication: Translating Research for Policymakers

Day 4: Data Collection, Cleaning, and Management
- Best Practices for Data Collection and Techniques for Data Cleaning
- Discussion: Ensuring Data Integrity
- Collaboration and Networking in Research: Building Research Partnerships

Day 5: Writing, Publishing, and Ethical Considerations
- Structuring an Academic Paper
- Citation and Referencing Techniques
- Understanding the Peer-Review Process
- Exercise: Reviewing Sample Research Papers
- Discussion: Ethical Issues and Research Integrity
- Workshop: Developing and Refining Manuscripts

Our Team and our Summer School 2024

The Better Policy Project

Great Things are Coming

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